The New York Nursing Home Health Information Technology Demonstration Project

Executive Summary

Following an arbitration award between a large portion of the New York nursing home industry in the New York metropolitan region and 1199 SEIU United Healthcare Workers East, the New York State legislature agreed to fund a demonstration project that would introduce a health information technology system into approximately 20 facilities covered by the agreement with the expectation that by so doing it would enhance the skills of the direct care staff, improve staff recruitment and retention and improve the quality of residents' care.

A three person group¹, the Quality Care Oversight Committee (QCOC), agreed to in the collective bargaining agreement, is charged with directing and monitoring the project. Through a competitive selection process eHealth Solutions' product SigmaCareTM was chosen as the technology "intervention". In addition to the specifications of the product itself², eHealth Solutions' approach to implementation, which focuses on change management and restructuring of work-flow processes, was felt to be critical to fully realizing the objectives of improved care delivery, decreased medical errors, lower costs and increased time available for staff to spend with residents.

The Nursing Home Division of the 1199SEIU Training & Upgrading Fund is providing staff to work alongside eHealth Solutions staff to ensure the seamless integration of this project at the facility-level. The Training Division staff has considerable expertise in adult learning, designing on-site education programs and facilitating labor-management collaboration – all essential to the success of this project.

A coordinated, multi-disciplinary evaluation is being conducted in order to document the demonstration's outcomes and gain a better understanding of several critical issues, namely:

- Does the use of health information technology (HIT) improve residents' care and make care more "person-centered"?
- Will HIT improve working conditions within facilities, reducing turnover and enhancing recruitment?
- Is there a "business case" to be made for the adoption of HIT in nursing homes?
- How do existing labor-management relations within a nursing home affect the acceptance and successful use of an HIT system and do labor-management relations change in any way as a result of such an intervention?

The QCOC has contracted with Cornell University's Institute on Conflict Resolution (ICR) and the Cornell Institute for Translational Research on Aging (CITRA) to examine impact in participating facilities on staff and residents and the Commonwealth Fund has made a

¹ Jay Sackman, (Former Executive V.P. – 1199SEIU Nursing Home Division), William Pascocello (Employer Representative) and Martin Scheinman (Industry Impartial Arbitrator)

² SigmaCareTM is a mobile electronic medical record (EMR) system specifically designed for nursing home staff. It enables staff to access residents' medical records at any time via small hand-held devices, laptops and/or desktop computers. It also connects to pharmacies, laboratories, physician's offices and payers.

grant to the University of Pennsylvania's Wharton School to study the business case. Specifically, the ICR team³ will focus on five central dimensions: a) workforce recruitment and retention; b) individual level outcomes, such as satisfaction and stress; c) organizational level effects; d) conflict and resistance to change; and e) labor-management relations. ICR research will be conducted at approximately fifteen of the participating nursing homes with an additional five nursing homes not receiving the technology serving as controls. A survey is being administered to a sample of staff members in the participating and control homes at baseline and will then be repeated post-implementation. In addition the ICR team is conducting a series of on-site interviews with direct care workers, administrative staff and key labor relations leaders to complement findings from the survey.

The CITRA team⁴ is focusing on resident outcomes in four domains: a) clinical outcomes including falls and accidents, skin breakdown, hospitalizations, behavior problems, and changes in functional status; b) quality of life outcomes; c) facility indicators of effects on residents; and d) subjective outcomes/satisfaction. The team is assessing these outcomes using validated qualitative and quantitative research instruments and measures and a mixed-method experimental design. Their part of the study is occurring in 5 treatment and 5 control homes utilizing a community-based participatory research design.

In addition to investigating resident and staff outcomes, the project is also studying the relationship between the introduction of an HIT system and "culture change" or person-centered care, first using person-centered care as an outcome variable (i.e. how the new technology affects the level of person-centered care provided by each of the participating nursing homes) and then using person-centered care as an independent variable, allowing an assessment of the effect of variance in the degree of person-centered care on the relative success or failure of the technology adoption.

Lastly, researchers at the Wharton School⁵ are examining how the deployment of HIT affects productivity, what the characteristics are of nursing homes that receive greater benefits from HIT adoption and what "the business case" is from an operator's perspective.

Project status:

• As of February 1, 2008 there are sixteen homes currently live with the technology. Three more going live in March and the last one the end of May.

- As of February 1, 2008 ICR has complete almost 1056 staff surveys,
- As of February 1, 2008 CITRA has completed approximately 1225 first stage resident interviews and 655 second stage resident interviews.

For further information please contact Scott White at swhite@1199funds.org

³ Led by Dr. David B. Lipsky, Professor of Dispute Resolution in the School of Industrial and Labor Relations and Director of the Cornell Institute on Conflict Resolution.

⁴ Under the direction of Dr. Karl Pillemer, Professor, Department of Human Development, and Director, Cornell Institute for Translational Research on Aging

⁵ Led by Dr. Lorin Hitt, Alberto Vitale Term Associate Professor of Operations and Information Management (OPIM) at the University of Pennsylvania, Wharton School and Senior Fellow of the Wharton Financial Institutions Center.